



1 mag 2

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1652

PTO/SB/21 (08-03)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	09/432,503
		Filing Date	November 2, 1999
		First Named Inventor	Cech, Thomas R.
		Art Unit	1652
		Examiner Name	Delia M. Ramirez
Total Number of Pages in This Submission		Attorney Docket Number	015389-002611US

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard, copies of eighty-four (84) cited references (in two boxes)
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual	Townsend and Townsend and Crew LLP Scott L. Aussenhus Reg. No. 42,271
Signature	
Date	04/09/04

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PATENT
Attorney Docket No.: 015389-002611US
Client Reference No.: 018/063C

On APRIL 9, 2004

TOWNSEND and TOWNSEND and CREW LLP

By: Nicole M. Wartell
Nicole M. Wartell

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Geron Corporation

Application No.: 09/432,503

Filed: November 2, 1999

For: HUMAN TELOMERASE
CATALYTIC SUBUNIT

Examiner: Delia M. Ramirez

Art Unit: 1652

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed.

Applicants also wish to make the Examiner aware of the following co-pending patent applications:

1. U.S. Patent App. No. 09/721,477, filed 11-22-2000, Applicant Cech et al., Attorney Docket No. 015389-002914US;
2. U.S. Patent App. No. 09/721,506, filed 11-22-2000, Applicant Cech et al., Attorney Docket No. 015389-002916US; and
3. U.S. Patent App. No. 09/974,584, filed 11-19-1997, Applicant Cech et al., Attorney Docket No. 015389-002950US.

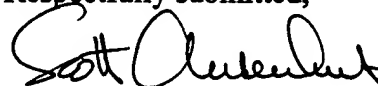
To comply with 37 CFR §1.98(a)(2)(iii), the specifications, drawings and currently pending claims for U.S. Application No. 09/974,584 (Attorney Docket No. 015389-002950) are enclosed. The currently pending claims from U.S. Application Nos. 09/721,477 (Attorney Docket No. 015389-002614US) and 09/721,506 (Attorney Docket No. 015389-002616US) are also enclosed; copies of the specification and drawings for these latter two applications are not enclosed because these applications are the same as this application, U.S. Application No. 09/432,503.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Scott L. Ausenhus
Reg. No. 42,271

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SLA:nmb



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/432,503	
			Filing Date	November 2, 1999	
			First Named Inventor	Cech, Thomas R.	
			Art Unit	1652	
Sheet	1	of	5	Examiner Name	Delia M. Ramirez
				Attorney Docket Number	015389-002611US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A1	US-5,597,897	01-28-1997	Diamond	
	A2	US-5,917,025	06-29-1999	Collins	
	A3	US-6,309,867 B1	10-30-2001	Cech et al.	
	A4	US-6,337,200 B1	01-08-2002	Morin	
	A5	US-6,440,735 B1	08-27-2002	Gaeta	
	A6	US-6,444,650 B1	09-03-2002	Cech et al.	
	A7	US-6,517,834 B1	02-11-2003	Weinrich et al.	
	A8	US-6,608,188 B1	08-19-2003	Tsuchiya et al.	
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	A12	US 2002-0184786 A1	11-07-2002	Cech et al.	
	A13	US 2002-0187471 A1	12-12-2002	Cech et al.	
	A14	US 2003-0009019 A1	01-09-2003	Cech et al.	
	A15	US 2003-0032075 A1	02-13-2003	Cech et al.	
	A16	US 2003-0044953 A1	03-06-2003	Cech et al.	
	A17	US 2003-0059787 A1	03-27-2003	Cech et al.	
	A18	US 2003-0096344 A1	05-22-2003	Cech et al.	
	A19	US 2003-0100093 A1	05-29-2003	Cech et al.	
	A20	U.S. Application No. 09/721,477		Cech et al.	
	A21	U.S. Application No. 09/721,508		Cech et al.	
	A22	U.S. Application No. 09/974,584		Cech et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	B1	CA	2271718	A1	05-22-1998			<input type="checkbox"/>
	B2	GB	2 317 891	A	04-08-1998			<input type="checkbox"/>
	B3	PCT	WO 93/23572	A1	11-25-1993			
	B4	PCT	WO 94/17210	A1	08-04-1994			
	B5	PCT	WO 98/14592	A2	04-09-1998			<input type="checkbox"/>
	B6	PCT	WO 98/14593	A2	04-09-1998			<input type="checkbox"/>
	B7	PCT	WO 98/23759	A2	06-04-1998			<input type="checkbox"/>
	B8	PCT	WO 99/33998	A2	07-08-1999			<input type="checkbox"/>
	B9	PCT	WO 99/38964	A2	08-05-1999			<input type="checkbox"/>
	B10	PCT	WO 00/46355	A2	08-10-2000			<input type="checkbox"/>

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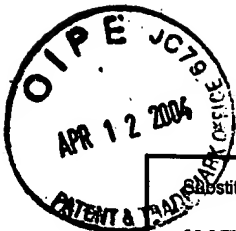
Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete If Known		
			Application Number	09/432,503	
			Filing Date	November 2, 1999	
			First Named Inventor	Cech, Thomas R.	
			Art Unit	1652	
			Examiner Name	Delia M. Ramirez	
			Attorney Docket Number	015389-002611US	
Sheet	2	of	5		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	C1	ADAMS, MARK et al. "Initial Assessment of Human Gene Diversity and Expression Patterns Based Upon 83 Million Nucleotides of cDNA Sequence" <i>The Genome Directory: Supplement to Nature</i> 28 September 1995, 1995, pp. 3-174, Vol. 377, Issue 6547S.		
	C2	ADAMSON, D. et al. "Significant Telomere Shortening in Childhood Leukemia", <i>Cancer Genet. Cytogenet.</i> 1992; pp. 204-206, Vol. 61.		
	C3	AUTEXIER, C. & GREIDER, C. "Telomerase and cancer: revisiting the telomere hypothesis; Trends in Biochemical Sciences, 1996, pp. 387-391, Vol. 10, No. 21.		
	C4	AVILION, A., "Characterization and expression of human telomerase," <i>Dissertation Abstracts International</i> , 1996, pp. 5930-B, Vol. 56, No. 11		
	C5	BARINGA, MARCIA, "The Telomerase Picture Fills In", <i>Science</i> , April 25, 1997; pp. 528-529, Vol. 276		
	C6	CHONG, L. et al. "A Human Telomeric Protein", <i>Science</i> , Dec. 1995, pp. 1663-1667, Vol. 270.		
	C7	COLLINS, KATHLEEN, "Structure and function of telomerase", <i>Current Opinion in Cell Biology</i> , 1996, pp. 374-380, Vol. 8		
	C8	COUNTER, C. et al. "Telomerase Activity in Normal Leukocytes and in Hematologic Malignancies" <i>Blood</i> ; May 1, 1995; pp. 2315-2320, Vol. 85, No. 9.		
	C9	COUNTER, C. et al. "Telomere shortening associated with chromosome instability is arrested in immortal cells which express telomerase activity", <i>The EMBO Journal</i> ; 1992, pp. 1921-1929, Vol. 11; No. 5, Oxford University Press.		
	C10	DE LANGE, T. et al. "Structure and Variability of Human Chromosome Ends"; <i>Molecular and Cellular Biology</i> ; February 1990; pp. 518-527, Vol. 10, No. 2.		
	C11	FLAVELL, R. & MATHIAS, R. "Prospects for transforming monocot crop plants", <i>Nature</i> , 12 Jan. 1984, pp. 108-109, Vol. 307.		
	C12	Genbank Accession No. A46242; September 21, 1993		
	C13	Genbank Accession No. L38903; January 30, 1995		
	C14	Genbank Accession No. Q06163; November 01, 1995		
	C15	Genbank Accession No. S39696; October 07, 1994		

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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



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			Application Number	09/432,503	
			Filing Date	November 2, 1999	
			First Named Inventor	Cech, Thomas R.	
			Art Unit	1652	
			Examiner Name	Delia M. Ramirez	
Sheet	3	of	5	Attorney Docket Number	015389-002611US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C16	Genbank Accession No. S53396; May 5, 1995	
	C17	GenBank Accession No. U95964; May 5, 1997	
	C18	GenBank Accession No. W70315; June 19, 1996	
	C19	GLASER, P. et al. "Bacillus subtilis genome project: cloning and sequencing of the 97 kb region from 325° to 333°" <i>Molecular Microbiology</i> , 1993, pp. 371-384, Vol. 10, No. 2.	
	C20	GOODMAN, R. et al. "Gene Transfer in Crop Improvement", <i>Science</i> , 3 April 1987, pp. 48-54, Vol. 236.	
	C21	GREIDER, C. "Telomeres, Telomerase and Senescence"; <i>BioEssays</i> ; 1990; pp. 363-369, Vol. 12, No. 8.	
	C22	HARLEY, C. "Telomere loss: Mitotic clock or genetic time bomb?" <i>Mutation Research</i> ; 1991; pp. 271- 282, Vol. 256, Elsevier Science Publishers.	
	C23	HARLEY, C. & VILLEPONTEAU, B. "Telomeres and telomerase in aging and cancer" <i>Current Opinion in Genetics and Development</i> ; 1995, pp. 249-255, Vol. 5.	
	C24	HARLEY, C. et al. "Telomeres shorten during ageing of human fibroblasts", <i>Nature</i> , 31 May 1990; pp. 458-460, Vol. 345.	
	C25	HASTIE, N. et al. "Telomere reduction in human colorectal carcinoma and with ageing", <i>Nature</i> , 30 August 1990, pp. 866-868, Vol. 346.	
	C26	HEALY, K. C. "Telomere dynamics and telomerase activation in tumor progression: prospects for prognosis and therapy" <i>Oncol. Res.</i> , 1995, pp. 121-130, Vol. 7	
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	C28	HIYAMA, E. et. al. "Correlating telomerase activity levels with human neuroblastoma outcomes"; <i>Nature Medicine</i> ; 3 March 1995; pp. 249-255, Vol. 1, No. 3.	
	C29	HOLZMANN, K. et al. "Telomeric Associations and Loss of Telomeric DNA Repeats in Renal Tumors", <i>Genes, Chromosomes & Cancer</i> , 1993, pp. 178-181, Vol. 6.	
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Examiner Signature		Date Considered	
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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 4 of 5

Complete if Known

Application Number	09/432,503
Filing Date	November 2, 1999
First Named Inventor	Cech, Thomas R.
Art Unit	1652
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	C31	JOLLIFFE, L.K. "Humanized antibodies: enhancing therapeutic utility through antibody engineering", <i>Int. Rev. Immunol.</i> , 1993, pp. 241-250, Vol. 10	
	C32	KIM, N. et al. "Specific Association of Human Telomerase Activity with Immortal Cells and Cancer", <i>Science</i> , 23 December 1994, pp. 2011-2014, Vol. 266.	
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	C34	LEWIS, A. & CROWE, J.S. "Generation of humanized monoclonal antibodies by 'best fit' framework selection and recombinant polymerase chain reaction", <i>Year Immunol.</i> , 1993, pp. 110-118, Vol. 7	
	C35	Linking telomerase and tumors; <i>Genesis Report- Dx</i> ; 1995; Vol. 4, No. 6; Publisher Genesis Group Associates.	
	C36	LUNDBLAD, V. & BLACKBURN, E., Letter to the Editor entitled, "RNA-Dependent Polymerase Motifs in EST1: Tentative Identification of a Protein Component of an Essential Yeast Telomerase", <i>Cell</i> , 23 Feb. 1990, pp. 529-530, Vol. 60.	
	C37	LUSTIG, ARTHUR J., "The identification of telomerase subunits: catalysing telomere research", <i>Trends in Cell Biology</i> ; August 1997, pp. 299-302, Vol. 7.	
	C38	MALICKI, J. et al. "A human <i>HOX4B</i> regulatory element provides head-specific expression in <i>Drosophila</i> embryos", <i>Nature</i> , 23 July 1992, pp. 345-357, Vol. 358.	
	C39	NAKAYAMA, J. et al. "Cloning of a Candidate cDNA Encoding a Proteinaceous Component of Mammalian Telomerase", <i>Molecular Biology Cell Abstracts Supp.</i> 7, 1996, p. 875-884, 286a Section 1664.	
	C40	NATARAJAN et al. "Major histocompatibility complex determinants select T-cell receptor alpha chain variable region dominance in a peptide-specific response." <i>Proc. Natl. Acad. Sci.</i> , Oct 1992, pp. 8874- 8878, Vol. 19.	
	C41	PASZKOWSKI, JERZY et al. "Direct gene transfer to plants," <i>The EMBO Journal</i> , 1984, pp. 2717- 2722, Vol. 3, No. 12.	
	C42	POTRYKUS, I. et al. "Direct gene transfer to cells of a graminaceous monocot", <i>Mol. Gen. Genet.</i> , 1985, pp. 183-188, Vol. 199.	
	C43	RAYMOND, E., et al.; Agents that target telomerase and telomeres; <i>Curr. Opin. Biotechnol.</i> ; 1996; 7:583-91	
	C44	RHYU, M.S. "Telomeres, telomerase, and immortality"; <i>J. Natl. Cancer Inst.</i> ; 21 June 1995; pp. 884- 894, Vol. 87, No. 12.	

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Sheet	5	of	5	Attorney Docket Number	015389-002611US

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	C45	SCHENA et al. "Parallel human genome analysis: Microarray-based expression monitoring of 1000 genes", <i>Proc. Natl. Acad. Sci.</i> , Oct. 1996, pp. 10614-10619, Vol. 93, USA.	
	C46	SCHWARTZ, H. et al. "Telomere Reduction in Giant Cell Tumor of Bone and with Aging"; <i>Cancer Genet Cytogenet</i> ; 1993; pp. 132-138, Vol. 71, Elsevier Science Publishing Co., Inc., New York, U.S.A.	
	C47	SINGER, M. "Unusual Reverse Transcriptases", <i>Journal of Biological Chemistry</i> ; 1995, pp. 24623-23626, Vol. 270, No. 42	
	C48	SMITH, J. & YEH, G. "Telomere Reduction in Endometrial Adenocarcinoma"; <i>Am. J. Obstet. Gynecol.</i> ; Dec. 1992; pp. 1883-1887, Vol. 167, No. 6	
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	C50	WINTER, G. & HARRIS, W. "Humanized Antibodies", <i>Trends Pharmacol. Sci.</i> , May 1993, pp. 139-143, Vol. 14.	
	C51	WIRTH, URS et al; "Immediate-Early RNA 2.9 and Early RNA 2.6 of Bovine Herpesvirus 1 Are 3' Coterminal and Encode of Putative Zinc Finger Transactivator Protein"; <i>Journal of Virology</i> ; May 1992; pp. 2763-2772, Vol. 66, No. 5.	
	C52	ZAUG, ARTHUR et al., "Method for determining RNA 3' ends and application to human telomerase RNA", <i>Nucleic Acids Research</i> , 1996, pp. 532-533, Vol. 24, No. 3.	

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